

REMARKS

The claims have been amended to correct various minor grammatical and idiomatic errors, and to place them in proper U.S. format. The scope of the claims has not been changed.

Reconsideration of the rejection of claims 1 and 2 under 35 USC §102(b) in view of U.S. Patent No. 5,493,477 (Hirai) is respectfully traversed on the grounds that the Hirai patent does not disclose a cartridge in which the rear of the upper shell is snapped into the packing rubbers *and* the front of the upper shell is provided with **hooks** at its corners and corresponding **slots** that are on *the same side as the front connection port*. Instead, Hirai merely shows the conventional cartridge illustrated in Fig. 1 of the present application, namely a cartridge in which the *rear* of the upper shell, *i.e.*, the side at which is located the **rear connector for connecting cables**, is snapped into place by means of hooks 11₂, while the front connection port of the upper shell is held by conventional “claws” 12 and **not** hooks of the type claimed.

It might be argued that “front” and “rear” are simply labels, and that the “front” end of the claimed connector could be interpreted as a “rear” end. However, such an interpretation would be contrary to the recitations in the claims that the “front” side is the side on which the “*connection port for connecting a computer or other peripheral circuit*” is located, and the “rear” side is the side on which the connector for connecting cables is located. In other words, the claims now positively relate the front and rear side to the connection port and cable connector of the PC cartridge.

Basically, the orientation of the cartridge illustrated in Hirai is **exactly opposite** that of the cartridge illustrated in Figs. 1-5 of the present application and positively recited in terms of a front connection port and rear cable connector, *i.e.*, the portion of the cartridge referred to as the “front” side in Hirai corresponds to the portion of the cartridge referred to as the “rear” side in the present application, which is positively recited as the side that includes the connector for connecting cables. This can be seen by comparing connector 10 in Hirai with connector A4

shown in Fig. 1 of the present application, and by comparing the L-shape (when viewed from above) of the packing rubber adjacent slot 13 of Hirai with the shape of the packing rubber adjacent slot A13 in Fig. 1. Further, the paragraph bridging pages 2 and 3 of the present application points out that the front end of the conventional cartridge is hooked together while the rear end is “snapped” together (see page 3, lines 1-3 of the present application). *This is exactly how the cartridge of Hirai is assembled, i.e., the end including claws 12 is hooked into the packing rubber while the end including hooks 11₂ is snapped into place* (see Fig. 3B of Hirai).

In other words, if one were to simply rotate the cartridge of Hirai by 180 degrees, one would notice that the cartridge of Hirai is identical to the prior art cartridge shown in Fig. 1 of the present application and now more positively claimed. What Hirai does not teach is that the side opposite the snap-together side, whether referred to as the “front” or the “rear,” is also provided with hooks. Hirai simply does not consider the stability of the side of the cartridge that includes claws 12, which correspond to hooks 11 in prior art cartridge shown in Fig. 1 of the present application.

The different functions of the claimed hooks and hooks 11₂ of Hirai is apparent from the fact that the hooks of the claimed invention are situated at “corners” of the cartridge, whereas the hooks 11₂ of Hirai are situated closer to the middle of the so-called “front” end. This is not merely a matter of design choice or simply a coincidence. Instead, the reason why the hooks of the claimed cartridge must be located at corners of the cartridge is that the end structure of the packing rubber on the side opposite snap-together side does not extend inwardly as far as on the side that includes the hooks. This can easily be seen in Fig. 2 of Hirai, in which the end structure engaged by claw or hook 13 does not extend inwardly as far as the end structure engaged by hooks 11₂, the reason for the difference being the different sizes of the electrical connectors at each end of the cartridge. While the cartridge of Hirai undoubtedly performs as well as the one shown in Fig. 1 of the present application (see page 3, lines 18-23 of the present application), it

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shares with the cartridge of Fig. 1 the problem of providing only a relatively weak coupling at the side opposite the snap-together side.

Of course, the addition of “folded hooks” rather than “claws” to the “corners” at the rear (connection port side) of the cartridge of Hirai is a very subtle change. Nevertheless, the addition addresses a problem not considered by Hirai, namely the problem of relatively weak coupling of the upper shell to the packing rubber at that end of the cartridge, in a way that is unlikely to have been considered by the ordinary artisan, if only because the addition of hooks to the “rear” side of the cartridge seems superfluous in the presence of hooks 11₂ at the front of the cartridge unless one considers the problem of weak coupling at the “rear” (or “front” or opposite) end of the cartridge. Since Hirai clearly does not consider this problem, much less offer a solution, and since the solution is positively claimed, it is respectfully submitted that the Hirai patent neither anticipates nor suggests, whether considered alone or in combination with any of the other references of record, the invention as presently claimed, and withdrawal of the rejection under 35 USC §102(b) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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